

Please replace the paragraph (Table 4) beginning at page 66, line 1, with the following paragraph (Table 4):

TABLE 4

| | I.U. of IL-2 | | | | |
|----------------------|--------------|------------|--------|--------|--------|
| temperature: | 37°C | 39°C | 41°C | 42°C | 44°C |
| heat shock duration: | continuous | continuous | 1 hr | 1hr | 0.5 hr |
| Lipid alone | 2.03 | 0.50 | 0.41 | 0.53 | 0.53 |
| L-27 | 14.28 | 9.88 | 5.95 | 9.88 | 7.80 |
| 007 | 336.76 | 318.49 | 334.02 | 373.74 | 389.27 |
| F12 | 78.40 | 106.88 | 149.93 | 230.02 | 188.13 |
| C8 | 9.19 | 8.03 | 11.74 | 8.73 | 16.37 |

IN THE CLAIMS:

Please cancel claims 6, 7 and 41.

Please amend claim 1 as follows:

1. (Twice Amended) A method of effecting expression of a selected polynucleotide in a mammalian cell comprising:
- (a) providing an expression construct, said expression construct comprising (i) a heat shock promoter selected from the group consisting of HSP70, HSP90, HSP60, HSP27, HSP25, and ubiquitin promoters, operably linked to a gene encoding a transactivating factor; and (ii) a second promoter operably linked to said selected polynucleotide, wherein said second promoter is activated by said transactivating factor;
 - (b) introducing said expression construct into said cell; and
 - (c) subjecting said cell to hyperthermic conditions which activate said heat shock promoter, wherein said conditions result in the expression of said selected polynucleotide.

5. The method of claim 1, wherein said hyperthermic conditions comprise a temperature between about 38°C and about 41°C.

Please amend claim 9 as follows:

9. (Amended) The method of claim 1, wherein said second promoter is selected from the group consisting of an HIV-1 promoter and an HIV-2 promoter.
10. The method of claim 1, wherein the expression of said selected polynucleotide results in the production of a polypeptide, a protein, a ribozyme, or an antisense nucleic acid.
11. The method of claim 1, wherein said selected polynucleotide encodes a protein selected from the group consisting of ornithine decarboxylase antizyme protein, p53, p16, neu, IL1, IL2, IL4, IL7, IL12, IL15, FLT-3 ligand, GM-CSF, G-CSF, IFN γ , IFN α , TNF, HSV-TK, I-CAM1, HLA-B7, and TIMP-3.
12. The method of claim 1, wherein said expression construct further comprises a gene encoding a selectable marker.
13. The method of claim 1, wherein said expression construct further comprises (i) a second selected polynucleotide operably linked to said second promoter; and (ii) an internal ribosome entry site positioned between said first and second selected polynucleotides.
14. The method of claim 1, wherein said cell is a tumor cell.
15. The method of claim 1, wherein the introduction of said expression construct into said cell is mediated by a delivery vehicle selected from the group consisting of

liposomes, retroviruses, adenoviruses, adeno-associated viruses, lentiviruses, herpes simplex viruses, and vaccinia viruses.

16. The method of claim 1, wherein the introduction of said expression construct into said cell occurs *in vitro*.
17. The method of claim 1, wherein the introduction of said expression construct into said cell occurs *in vivo*.

Please amend claim 18 as follows:

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18. (Twice Amended) A method of providing a subject with a therapeutically effective amount of an expression product of a selected polynucleotide comprising:
 - (a) providing an expression construct, said expression construct comprising (i) a heat shock promoter selected from the group consisting of HSP70, HSP90, HSP60, HSP27, HSP25, and ubiquitin promoters, operably linked to a gene encoding a transactivating factor; and (ii) a second promoter operably linked to said selected polynucleotide, wherein said second promoter is activated by said transactivating factor;
 - (b) introducing said expression construct into a cell of said subject; and
 - (c) subjecting said cell to hyperthermic conditions which activate said heat shock promoter, wherein expression of said selected polynucleotide is induced by said hyperthermic conditions.

20. The method of claim 18, wherein said first and second expression constructs are on the same vector.
21. The method of claim 20, wherein the introduction of said expression constructs into said cell occurs *ex vivo*.

22. The method of claim 18, wherein the introduction of said expression constructs into said cell occurs *in vivo*.
23. The method of claim 18, wherein the expression product of said selected polynucleotide is harmful to a pathogen in said subject, wherein said pathogen is selected from the group consisting of viruses, bacteria, fungi, and parasites.
24. The method of claim 18, wherein the expression product of said selected polynucleotide inhibits the growth of said cell.
25. The method of claim 18, wherein the expression product of said selected polynucleotide replaces a deficient protein in said subject.
26. The method of claim 18, wherein the expression product of said selected polynucleotide promotes nerve regeneration.

Please amend claim 33 as follows:

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33. (Twice Amended) A method for provoking an immune response in a mammal comprising:
- (a) providing an expression construct, said expression construct comprising (i) a heat shock promoter selected from the group consisting of HSP70, HSP90, HSP60, HSP27, HSP25, and ubiquitin promoters, operably linked to a gene encoding a transactivating factor; and (ii) a second promoter operably linked to a selected polynucleotide, wherein said second promoter is activated by said transactivating factor;
 - (b) introducing said expression construct into a cell in the mammal; and
 - (c) subjecting said cell to hyperthermic conditions which activate said heat shock promoter, wherein said hyperthermic conditions result in the expression of said selected polynucleotide and the expression product of the

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selected polynucleotide is expressed in an amount effective to provoke an immune response in said mammal, said immune response being selected from the group consisting of a humoral immune response and a cellular immune response.

35. The method of claim 33, wherein the immune response is directed against said cell.
36. The method of claim 35, further comprising treating said cell with an established form of therapy for cancer selected from the group consisting of chemotherapy, external beam radiation therapy, brachytherapy, and surgery.
37. The method of claim 33, wherein said mammal is a human.

Please amend claim 38 as follows:

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38. (Twice Amended) A method of altering the genetic material of a mammal, comprising:
- (a) providing an expression construct, said expression construct comprising (i) a heat shock promoter selected from the group consisting of HSP70, HSP90, HSP60, HSP27, HSP25, and ubiquitin promoters, operably linked to a gene encoding a transactivating factor; and (ii) a second promoter operably linked to a selected polynucleotide, wherein said second promoter is activated by said transactivating factor; and
 - (b) introducing said expression construct into a cell of said mammal.

Please amend claim 39 as follows:

39. (Twice Amended) An expression construct comprising:
- (a) a gene encoding a transactivating factor;
 - (b) a heat shock promoter selected from the group consisting of HSP70, HSP90, HSP60, HSP27, HSP25, and ubiquitin promoters, operably linked

to said gene, wherein said heat shock promoter is activated at hyperthermic conditions;

- (c) a selected polynucleotide; and
- (d) a second promoter operably linked to said selected polynucleotide, said second promoter being activated by said transactivating factor.
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43. The expression construct of claim 39, wherein said second promoter is selected from the group consisting of HIV-1 promoter and HIV-2 promoter and said transactivating factor is selected from the group consisting of tat.
44. The expression construct of claim 39, wherein expression of said selected polynucleotide results in the production of a polypeptide, protein, ribozyme or antisense molecule.
45. The expression construct of claim 39, wherein said expression construct further comprises (i) a second selected polynucleotide operably linked to said second promoter; and (ii) an internal ribosome entry site positioned between said first and second selected polynucleotides.
46. A cell comprising the expression construct of claim 39.

Please add claim 47.

47. (New) The method of claim 1, wherein said transactivating factor is tat.